

Newly presented claims 44 - 64 cover the same patentable invention as claims 1 - 5, 6 - 8, 10 - 18, 20 - 21, and 23 - 25 of Titterington U.S. Patent No. 6,464,846 issued on October 15, 2002. It is believed that an interference should be declared on the following proposed counts:

### COUNT I

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface; and

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.

Claim 1 of U.S. Patent No. 6,464,846 and claim 44 of the instant application correspond to proposed Count I.

The terms of the application claim 44 corresponding to proposed Count I are supported in Applicants' specification as follows:

Terms in Claim	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
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## COUNT II

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said

single sheet; and

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.

Claims 1 and 2 of U.S. Patent No. 6,464,846 and claims 44 and 45 of the instant application correspond to proposed Count II.

The terms of the application claims 44 and 45 corresponding to proposed Count II are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 - page 15, line 9</p>

### COUNT III

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said

single sheet;

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed; and

wherein said single sheet of electrically-conductive material is a sheet of metal.

Claims 1 - 3 of U.S. Patent No. 6,464,846 and claims 44 - 46 of the instant application correspond to proposed Count III.

The terms of the application claims 44 - 46 corresponding to proposed Count III are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>46. The electrically-conductive compression pad as claimed in claim 45 wherein said single sheet of electrically-conductive material is a sheet of metal.</p>	<p>suitable electrically conductive materials include "conductive metals," page 12, lines 1-14</p>

#### COUNT IV

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet; wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet;

wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed;

wherein said single sheet of electrically-conductive material is a sheet of metal; and

wherein said metal is selected from the group consisting of niobium, titanium, zirconium, tantalum, copper, nickel, steel, and hastelloys.

Claims 1 - 4 of U.S. Patent No. 6,464,846 and claims 44 - 47 of the instant application correspond to proposed Count IV.

The terms of the application claims 44 - 47 corresponding to proposed Count IV are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad  suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	pressure pad 82, figures 3, 4A and 4B  cell system 60, figure 3

<p>a single sheet of electrically-conductive material,</p> <p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19</p> <p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>46. The electrically-conductive compression pad as claimed in claim 45 wherein said single sheet of electrically-conductive material is a sheet of metal.</p>	<p>suitable electrically conductive materials include "conductive metals," page 12, lines 1-14</p>
<p>47. The electrically-conductive compression pad as claimed in claim 46 wherein said metal is selected from the group consisting of niobium, titanium, zirconium, tantalum, copper, nickel, steel, and hastelloys.</p>	<p>suitable electrically conductive materials include niobium, titanium, zirconium, tantalum, copper, nickel, steel, and hastelloys, page 12, lines 1-14</p>



## COUNT V

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said

single sheet;

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed;

wherein said single sheet of electrically-conductive material is a sheet of metal; and

wherein said metal is niobium.

Claims 1 - 5 of U.S. Patent No. 6,464,846 and claims 44 – 46 and 48 of the instant application substantially correspond to proposed Count V.

The terms of the application claims 44 – 46 and 48 corresponding to proposed Count V are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad  suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	pressure pad 82, figures 3, 4A and 4B  cell system 60, figure 3

<p>a single sheet of electrically-conductive material,</p> <p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19</p> <p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>46. The electrically-conductive compression pad as claimed in claim 45 wherein said single sheet of electrically-conductive material is a sheet of metal.</p>	<p>suitable electrically conductive materials include "conductive metals," page 12, lines 1-14</p>
<p>48. The electrically-conductive compression pad as claimed in claim 46 wherein said metal is niobium.</p>	<p>suitable electrically conductive materials include niobium, page 12, lines 1-14</p>

## COUNT VI

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet;

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed; and

wherein said elastomeric material is a rubber.

Claims 1, 2, and 7 of U.S. Patent No. 6,464,846 and claims 44, 45, and 49 of the instant application substantially correspond to proposed Count VI

The terms of the application claims 44, 45, and 49 corresponding to proposed Count VI are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>49. The electrically-conductive compression pad as claimed in claim 45 wherein said elastomeric material is a rubber.</p>	<p>The term "rubber" is defined in U.S. Patent No. 6,464,846 as "elastomeric material including rubbers, such as silicone rubber, fluorosilicone rubber, nitrite rubber, and polyurethane," see column 6, lines 33-35 of U.S. Patent No. 6,464,846. The present application recites "suitable elastomeric materials include, but are not limited to silicones, such as, for example, fluorosilicones, fluoroelastomers...", see page 12, lines 16-21. In accordance with the use of the term "rubber" in U.S. Patent No. 6,464,846, the present application recites specifics of what are generally referred to as "rubber."</p>

## COUNT VII

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said

single sheet;

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed; and

wherein said elastomeric material is a silicone.

Claims 1, 2, 7, and 8 of U.S. Patent No. 6,464,846 and claims 44, 45, and 50 of the instant application substantially correspond to proposed Count VII.

The terms of the application claims 44, 45, and 50 corresponding to proposed Count VII are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>50. The electrically-conductive compression pad as claimed in claim 45 wherein said elastomeric material is a silicone.</p>	<p>"suitable elastomeric materials include, but are not limited to silicones," page 12, lines 16-21</p>

## COUNT VIII

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said

single sheet;

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed; and

wherein said single sheet of electrically-conductive material is circular in shape.

Claims 1, 2, and 10 of U.S. Patent No. 6,464,846 and claims 44, 45, and 51 of the instant application correspond to proposed Count VIII.

The terms of the application claim 44, 45, and 51 corresponding to proposed Count VIII are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>51. The electrically-conductive compression pad as claimed in claim 45 wherein said single sheet of electrically-conductive material is circular in shape.</p>	<p>The embodiment of figures 7-9 show a circular shaped pressure pad 382 having all the features of pressure pad 82, although employing dimples 396 as compared to corrugations (elastomeric members are disposed within the dimples and on both surfaces), see page 16, line 21 – page 18, line 5.</p>



## COUNT IX

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface;

elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet;

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed; and

wherein said single sheet of electrically-conductive material is rectangular in shape.

Claims 1, 2, and 11 of U.S. Patent No. 6,464,846 and claims 44, 45, and 52 of the instant application correspond to proposed Count IX.

The terms of the application claims 44, 45, and 52 corresponding to proposed Count IX are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
44. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19
said single sheet of electrically-conductive material having a top surface and a bottom surface; and	surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19

<p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>
<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>52. The electrically-conductive compression pad as claimed in claim 45 wherein said single sheet of electrically-conductive material is rectangular in shape.</p>	<p>the compression pad 82 shown in figure 4A is shown as rectangular in shape</p>

## COUNT X

An electrolysis cell stack comprising:

a first electrolysis cell;

a second electrolysis cell, said second electrolysis cell being arranged in series with said first electrolysis cell; and

an electrically-conductive compression pad interposed between said first electrolysis cell and said second electrolysis cell, said electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising,

(1) a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface,

(2) elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet, and

wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.

Claims 12, 1, and 2 of U.S. Patent No. 6,464,846 and claims 53, 44, and 45 of the instant application correspond to proposed Count X.

The terms of the application claims 53, 44, and 45 corresponding to proposed Count X are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
<p>53. An electrolysis cell stack comprising:  a first electrolysis cell;  a second electrolysis cell, said second electrolysis cell being arranged in series with said first electrolysis cell; and</p> <p>the electrically-conductive compression pad of claim 45 interposed between said first electrolysis cell and said second electrolysis cell.</p>	<p>"Cell system 60 typically includes a plurality of cells employed in a stack as a part of the cell system.", page 8, lines 3-4. "The number of cells within the stack and the dimensions of the individual cells is scalable to the cell power output and/or gas output requirements.", page 8, lines 10-11.</p> <p>See Claims 44 and 45 below. Pressure pad 82 is disposed at the cell separator plate 84, whereby it is between cells of a stack. See figure 3.</p>
<p>44. An electrically-conductive compression pad</p> <p>suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:</p> <p>a single sheet of electrically-conductive material,</p> <p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>pressure pad 82, figures 3, 4A and 4B</p> <p>cell system 60, figure 3</p> <p>electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19</p> <p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>

<p>45. The electrically-conductive compression pad as claimed in claim 44 wherein said elastomeric material is arranged on each of said top and bottom surfaces of said single sheet</p> <p>and wherein said single sheet of electrically-conductive material is bent to lie flush with said elastomeric material at one or more points on each of said top and bottom surfaces when said elastomeric material is compressed.</p>	<p>elastomeric member 92 is shown in figures 4A and B at both the top and bottom surfaces of electrically conductive sheet 90</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and recessed in figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
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## COUNT XI

An electrolysis cell stack comprising:

a first electrolysis cell;

a second electrolysis cell, said second electrolysis cell being arranged in series with said first electrolysis cell; and

an electrically-conductive compression pad interposed between said first electrolysis cell and said second electrolysis cell, said electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising,

(1) a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, and

(2) elastomeric material arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.

Claims 13 and 1 of U.S. Patent No. 6,464,846 and claims 54 and 44 of the instant application correspond to proposed Count XI.

The terms of the application claims 54 and 44 corresponding to proposed Count XI are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
54. An electrolysis cell stack comprising: a first electrolysis cell; a second electrolysis cell, said second electrolysis cell being arranged in series with said first electrolysis cell; and	"Cell system 60 typically includes a plurality of cells employed in a stack as a part of the cell system.", page 8, lines 3-4. "The number of cells within the stack and the dimensions of the individual cells is scalable to the cell power output and/or gas output requirements.", page 8, lines 10-11.

<p>the electrically-conductive compression pad of claim 44 interposed between said first electrolysis cell and said second electrolysis cell.</p>	<p>See claim 44 below. Pressure pad 82 is disposed at the cell separator plate 84, whereby it is between cells of a stack. See figure 3.</p>
<p>44. An electrically-conductive compression pad</p> <p>suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:</p> <p>a single sheet of electrically-conductive material,</p> <p>said single sheet of electrically-conductive material having a top surface and a bottom surface; and</p> <p>elastomeric material</p> <p>arranged on said single sheet of electrically-conductive material in such a way that, when said elastomeric material is compressed, substantially uniform pressure is exerted across each of said top surface and said bottom surface of said single sheet.</p>	<p>pressure pad 82, figures 3, 4A and 4B</p> <p>cell system 60, figure 3</p> <p>electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19</p> <p>surfaces of sheet 90 are shown in figures 4A and B although not numbered; page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>"to provide for even distribution of compression " and "to assist in providing for the even distribution of compression," page 12, lines 1-21</p>

## COUNT XII

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.

Claim 14 of U.S. Patent No. 6,464,846 and claim 55 of the instant application correspond to proposed Count XII.

The terms of the application claim 55 corresponding to proposed Count XII are supported in Applicants' specification as follows:

Terms in Claim	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19
said single sheet of electrically-conductive material having a top surface and a bottom surface,	surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19



<p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
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### COUNT XIII

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet; and

wherein said alternating ribs and channels are linear and parallel to one another.

Claims 14 and 15 of U.S. Patent No. 6,464,846 and claims 55 and 56 of the instant application correspond to proposed Count XIII.

The terms of the application claims 55 and 56 corresponding to proposed Count XIII are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>56. The electrically-conductive compression pad as claimed in claim 55 wherein said alternating ribs and channels are linear and parallel to one another.</p>	<p>corrugated sheet 90 having depressed portions 98 and raised portions 94 which are shown to be linear and parallel in figures 4A and B, page 14, lines 7-19</p>

## COUNT XIV

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet; and

wherein said single sheet of electrically-conductive material is a sheet of metal.

Claims 14 and 16 of U.S. Patent No. 6,464,846 and claims 55 and 57 of the instant application correspond to proposed Count XIV.

The terms of the application claims 55 and 57 corresponding to proposed Count XIV are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>57. The electrically-conductive compression pad as claimed in claim 55 wherein said single sheet of electrically-conductive material is a sheet of metal.</p>	<p>suitable electrically conductive materials include "conductive metals," page 12, lines 1-14</p>

## COUNT XV

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet;

wherein said single sheet of electrically-conductive material is a sheet of metal; and

wherein said metal is selected from the group consisting of niobium, titanium, zirconium, tantalum, copper, nickel, steel and hastelloys.

Claim 14, 16, and 17 of U.S. Patent No. 6,464,846 and claims 55, 57, and 58 of the instant application correspond to proposed Count XV.

The terms of the application claims 55, 57, and 58 corresponding to proposed Count XV are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad  suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	pressure pad 82, figures 3, 4A and 4B  cell system 60, figure 3

<p>a single sheet of electrically-conductive material,</p> <p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19</p> <p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>57. The electrically-conductive compression pad as claimed in claim 55 wherein said single sheet of electrically-conductive material is a sheet of metal.</p>	<p>suitable electrically conductive materials include "conductive metals," page 12, lines 1-14</p>
<p>58. The electrically-conductive compression pad as claimed in claim 57 wherein said metal is selected from the group consisting of niobium, titanium, zirconium, tantalum, copper, nickel, steel and hastelloys.</p>	<p>suitable electrically conductive materials include niobium, titanium, zirconium, tantalum, copper, nickel, steel and hastelloys, page 12, lines 1-14</p>

## COUNT XVI

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet;

wherein said single sheet of electrically-conductive material is a sheet of metal; and

wherein said metal is niobium.

Claims 14, 16, 17, and 18 of U.S. Patent No. 6,464,846 and claims 55, 57, and 59 of the instant application substantially correspond to proposed Count XVI.

The terms of the application claim 55, 57, and 59 corresponding to proposed Count XVI are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19



<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>\</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>57. The electrically-conductive compression pad as claimed in claim 55 wherein said single sheet of electrically-conductive material is a sheet of metal.</p>	<p>suitable electrically conductive materials include "conductive metals," page 12, lines 1-14</p>
<p>59. The electrically-conductive compression pad as claimed in claim 57 wherein said metal is niobium.</p>	<p>suitable electrically conductive materials include niobium, page 12, lines 1-14</p>

## COUNT XVII

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet; and

wherein said elastomeric material is a rubber.

Claims 14 and 20 of U.S. Patent No. 6,464,846 and claims 55 and 60 of the instant application substantially correspond to proposed Count XVII.

The terms of the application claims 55 and 60 corresponding to proposed Count XVII are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>60. The electrically-conductive compression pad as claimed in claim 55 wherein said elastomeric material is a rubber</p>	<p>The term "rubber" is defined in U.S. Patent No. 6,464,846 as "elastomeric material including rubbers, such as silicone rubber, fluorosilicone rubber, nitrite rubber, and polyurethane," see column 6, lines 33-35 of U.S. Patent No. 6,464,846. The present application recites "suitable elastomeric materials include, but are not limited to silicones, such as, for example, fluorosilicones, fluoroelastomers...", see page 12, lines 16-21. In accordance with the use of the term "rubber" in U.S. Patent No. 6,464,846, the present application recites specifics of what are generally referred to as "rubber."</p>

## COUNT XVIII

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet; and

wherein said elastomeric material is a silicone.

Claims 14, 20, and 21 of U.S. Patent No. 6,464,846 and claims 55 and 61 of the instant application substantially correspond to proposed Count XVIII.

The terms of the application claims 55 and 61 corresponding to proposed Count XVII are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>61. The electrically-conductive compression pad as claimed in claim 55 wherein said elastomeric material is a silicone.</p>	<p>"suitable elastomeric materials include, but are not limited to silicones," page 12, lines 16-21</p>

## COUNT XIX

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet; and

wherein said single sheet of electrically-conductive material is circular in shape.

Claims 14 and 23 of U.S. Patent No. 6,464,846 and claims 55 and 62 of the instant application substantially correspond to proposed Count XIX.

The terms of the application claims 55 and 62 corresponding to proposed Count XIX are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19

<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>62. The electrically-conductive compression pad as claimed in claim 55 wherein said single sheet of electrically-conductive material is circular in shape.</p>	<p>The embodiment of figures 7-9 show a circular shaped pressure pad 382 having all the features of pressure pad 82, although employing dimples 396 as compared to corrugations (elastomeric members are disposed within the dimples and on both surfaces), see page 16, line 21 – page 18, line 5.</p>

## COUNT XX

An electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:

a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels;

elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet; and

wherein said single sheet of electrically-conductive material is rectangular in shape.

Claims 14 and 24 of U.S. Patent No. 6,464,846 and claims 55 and 63 of the instant application correspond to proposed Count XX.

The terms of the application claims 55 and 63 corresponding to proposed Count XX are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
55. An electrically-conductive compression pad	pressure pad 82, figures 3, 4A and 4B
suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:	cell system 60, figure 3
a single sheet of electrically-conductive material,	electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19



<p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p> <p>mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.</p>	<p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p> <p>corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9</p>
<p>63. The electrically-conductive compression pad as claimed in claim 55 wherein said single sheet of electrically-conductive material is rectangular in shape.</p>	<p>the compression pad 82 shown in Figure 4A is shown as rectangular in shape</p>

## COUNT XXI

An electrolysis cell stack comprising:

a first electrolysis cell;

a second electrolysis cell, said second electrolysis cell being arranged in series with said first electrolysis cell;

an electrically-conductive compression pad interposed between said first electrolysis cell and said second electrolysis cell, said electrically-conductive compression pad suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising,

(1) a single sheet of electrically-conductive material, said single sheet of electrically-conductive material having a top surface and a bottom surface, said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels, and

(2) elastomeric material mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.

Claims 25 and 14 of U.S. Patent No. 6,464,846 and claims 65 and 55 of the instant application correspond to proposed Count XXI.

The terms of the application claims 64 and 55 corresponding to proposed Count XXI are supported in Applicants' specification as follows:

Terms in Claims	Supporting Language in Specification
<p>64. An electrolysis cell stack comprising:  a first electrolysis cell;  a second electrolysis cell, said second electrolysis cell being arranged in series with said first electrolysis cell; and</p> <p>the electrically-conductive compression pad of claim 55 interposed between said first electrolysis cell and said second electrolysis cell.</p>	<p>"Cell system 60 typically includes a plurality of cells employed in a stack as a part of the cell system.", page 8, lines 3-4. "The number of cells within the stack and the dimensions of the individual cells is scalable to the cell power output and/or gas output requirements.", page 8, lines 10-11.</p> <p>See Claim 55 below. Pressure pad 82 is disposed at the cell separator plate 84, whereby it is between cells of a stack. See figure 3.</p>
<p>55. An electrically-conductive compression pad</p> <p>suitable for use in an electrolysis cell stack, said electrically-conductive compression pad comprising:</p> <p>a single sheet of electrically-conductive material,</p> <p>said single sheet of electrically-conductive material having a top surface and a bottom surface,</p> <p>said single sheet of electrically-conductive material being bent up and down to include a plurality of alternating ribs and channels; and</p> <p>elastomeric material</p>	<p>pressure pad 82, figures 3, 4A and 4B</p> <p>cell system 60, figure 3</p> <p>electrically conductive sheet 90, figures 4A and B, page 14, lines 7-19</p> <p>surfaces of sheet 90 are shown in figures 4A and B although not numbered, page 14, lines 7-19</p> <p>corrugated sheet 90 having depressed portions 98 and raised portions 94, figures 4A and B, page 14, lines 7-19</p> <p>elastomeric member 92, figures 4A and B, page 14, line 7 – page 15, line 9</p>

mounted within said channels, said elastomeric material being dimensioned so that, when said elastomeric material is compressed, said elastomeric material lies flush with said ribs and exerts substantially uniform pressure across each of said top surface and said bottom surface of said single sheet.

corrugated sheet 90 has depressed portions 98 and raised portions 94 which are shown flush with elastomeric member 92 in figure 4A and are recessed in Figure 4B, of the same pressure pad 82, page 14, line 7 – page 15, line 9

The application has not yet had references cited by the U.S. Patent and Trademark Office. However, numerous references have been submitted by the applicant. These references have been considered in view of the newly presented claims 44 – 64. Newly presented claims 44-64 are believed to be patentable over the previously submitted references as an electrically-conductive compression pad suitable for use in an electrolysis cell stack having a single sheet of electrically-conductive material with an elastomeric material arranged thereon, configured as recited in said claims, is not taught nor suggested in said references.

Applicant's effective filing date (i.e., September 27, 2000) is earlier than the effective filing date of U.S. Patent No. 6,464,846 (i.e., December 21, 2000). This application claims benefit of Provisional U.S. Patent Application Serial Nos. 60/235,872, 60/235,629, and 60/235,871, all of which were filed September 27, 2000.

Entry and consideration of this Amendment are respectfully requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorney.

Respectfully submitted,

CANTOR COLBURN LLP  
Applicants' Attorneys

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